
Chapter 4: Managing applications

The system administration interface includes a facility for managing your Meridian IVR applications. You can load/unload applications, assign applications to different channels, and start or stop execution. You can also create scripts to automate the process of loading and running applications.

Procedure 4-1 Accessing Application Management

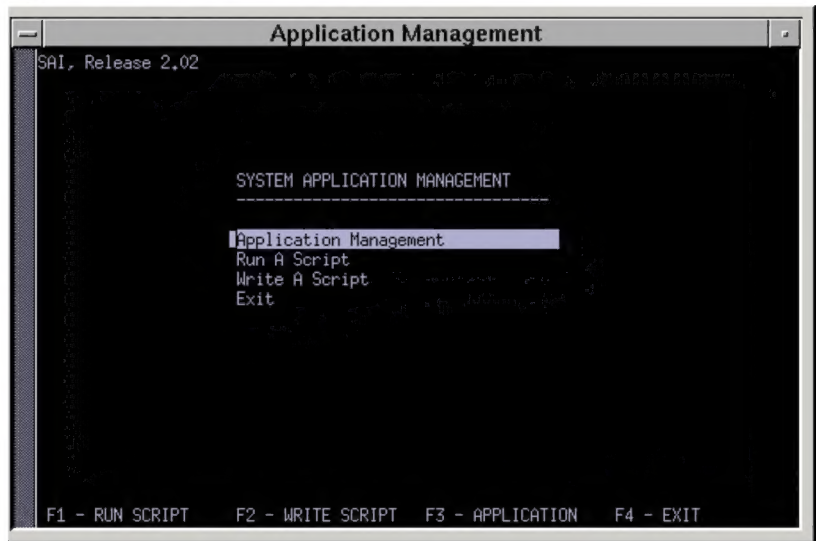
- 1 From the Meridian IVR main menu, click on the first icon.
The menu for Application Management appears, as shown in Figure 4-1.

Figure 4-1
The Application Management menu



- 2 Drag the mouse until Application Management is highlighted and release the mouse button.
An outline for the window appears on the desktop.
- 3 Move the cursor to where you want to place this new window.
- 4 Press the left mouse button to release the window on the desktop.

Figure 4-2
Application Management window



Developing, testing, and modifying applications on a live system

Meridian IVR systems include both a development and run-time capability so that IVR applications can be developed and tested on the same system.

Therefore, you can make minor modifications to an existing application while the system is running. For example, an airline that has just announced a seat sale can quickly add a new selection to a voice menu. This capability does not apply to the Run-Time system; it applies only to the Development system.

If the Meridian IVR system is being used for new application development or application modification in a “live” customer environment, sufficient caution should be used to ensure that the new application development/testing does not impact existing running applications. In particular, the following cautions and recommendations should be noted.

ATTENTION!

Never change the live application. The live application itself should not be changed. The application developer should make a copy of the application, modify the copy, test the copy on a dedicated test channel isolated from normal customer traffic, then replace the application with the new modified version.

Response times can be impacted

On-line development using the Application Editor consumes CPU cycles, which impacts the response times of running applications. To minimize the risk, such changes should be made during a relatively low traffic period.



CAUTION!

Risk of system damage

Apply extreme caution in testing custom “C” code.

Applications that use custom user functions (“C” code) should not be tested on a live system, as a poorly written, untested custom “C” program can cause the entire IVR system to stop functioning, necessitating an IVR reset.

In addition, the compilation of “C” code on a live system uses a lot of CPU cycles, which can impact the response time of live applications.

Ensure that the test environment is isolated

While testing new applications, ensure that the application test environment classes such as Meridian Mail and IVR channels, ACD routing, VSDN, and ACCESS are fully isolated from the live applications and, as such, do not impact live applications. We recommend that you follow these guidelines:

- Preliminary testing by the VAD on a captive development Meridian IVR system, including Meridian Mail and Meridian 1 PBX with trunks, is necessary but not sufficient. Controlled testing to prove the sanity of the application on a live system is still needed even after the best efforts of testing on a captive development system.
- To minimize the risk of service interruptions, new or modified call-flow applications should be tested in three phases:

Phase 1

Test channels in isolation from receiving customer traffic; tester-generated traffic only.

Phase 2

A single-monitored test channel receiving customer traffic.

Phase 3

A few monitored test channels receiving customer traffic.

- The tester must understand the distinctions between Meridian IVR logical channel acquisition type (dedicated versus shared), Meridian Mail voice service channel service type (ACCESS versus ALL), and Meridian 1 PBX ACD traffic routing. “Dedicated” test channels refer to channel dedication for a specific function, such as running a test application, rather than a dedicated Meridian Mail channel.
- If possible, testing of new or modified applications should be done on test channels of dedicated acquisition type so as not to impact live applications when setting up or taking down the isolated test environment.

Note: Some applications (such as those using the Prompt Update on Next Cell feature) require that Meridian IVR logical channels be configured for shared acquisition type.

- Dedicated acquisition type ties a Meridian IVR logical channel to an individual Meridian Mail voice channel. Test traffic can be routed to the application that is being proved. This can be done by assigning the ACD Agent Position for the test channel to an ACD queue that can be dedicated to routing test calls only. This is achieved most conveniently by using ACD Automatic Overflow. It changes the Overflow DN's to selectively route live customer traffic into the test channel during Phase 2 and Phase 3 testing, and whenever it is not being used for testing. During Phase 1 testing, customer traffic can be prevented from overflowing into the test channel.
- Shared acquisition type depends on the ACCESS class defined for the logical channel and for the dialed DN in the Meridian Mail VSDN table. The Meridian IVR logical channel is tied to the dialed DN (and not to any individual Meridian Mail voice channel). Establishing an isolated test environment with shared acquisition type involves configuring a Meridian IVR logical channel with an ACCESS class that is dedicated to the test application and the dialed DN.
- With shared acquisition type, it is impossible to switch a logical channel between customer traffic and tester-generated traffic without interrupting service on all channels. This is because the switch is accomplished by changing the class of the logical channel through Meridian IVR system configuration. Reconfiguring a single logical channel requires that all Meridian IVR channels be stopped and restarted, which momentarily interrupts service on all live applications.

- ACD traffic routing on the Meridian 1 PBX must be controlled so that the number of Meridian Mail voice channels that can present calls to ACCESS VSDNs of a given class do not exceed the number of active Meridian IVR logical channels configured for the given class. Otherwise, some calls will be answered, only to be transferred to the Revert DN. Again, ACD Automatic Overflow provides the most convenient means of controlling call routing in the Meridian 1 PBX. The Overflow DNs can be changed to prevent excess calls from being presented to logical channels of shared acquisition type.
- Outbound applications cannot be set to run exclusively against a particular Meridian IVR logical channel. It is therefore impossible to establish an isolated test environment for outbound applications on a live system.
- Meridian IVR Application Management provides the capability to stop an application gracefully or forcefully.
- “Stop Forcefully” idles logical channels that are hung, due either to User Function Cell failure or to other application problems. It does not recover logical channels that are out of service due to out of service Meridian Mail channels, or ACCESS Link problems.
- To minimize service interruption when using “Stop Forcefully” to recover hung Meridian IVR logical channels, load a separate instance of a given application (copied and suitably renamed) for each logical channel or small range of logical channels. Use “Stop Gracefully”, monitor the channel board lights until only the hung channel is still busy, then use “Stop Forcefully” to recover the hung channel.

- Until the application for the range of channels is restarted, customer calls are routed to the stopped channels. Each call is answered and transferred back to the dialed DN which puts the caller to the back of the queue. The original CLID can be replaced by the Agent Position ID of the transferring Meridian Mail agent.
- When testing applications that use new or modified voice prompts, before making changes to the files using the VPE, it is critical that existing voice segment files are backed up. This is done by copying them to tape using the Meridian Mail ACCESS Prompt Transfer tool.
- You must create a dedicated test mailbox. The Meridian IVR test channels must be configured to use the dedicated test mailbox. If voice segments are to be added or modified, then the backup of the voice segment files currently in use must be copied into the test mailbox. All changes should be thoroughly tested before copying the modified voice segment files into the mailbox that provides the voice prompts for customer traffic.

Note: Changing the mailbox for a single logical channel in Meridian IVR system configuration requires restarting all Meridian IVR channels in order for the reconfiguration to take effect.

Loading an application

After an application developer creates an application, you can load and assign it to a set of channels. The loading process opens the application's databases and starts any user function that may be associated with the application. Once loaded, an application cannot process telephone calls until it has been started.

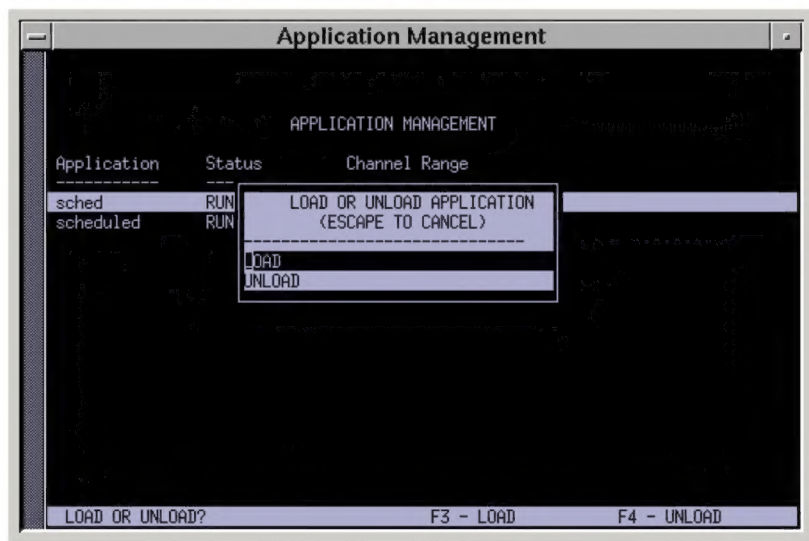
Note: You can load only applications stored in the /u/ivr/gen/apps directory located in the base directory of Meridian IVR.

Procedure 4-2 Loading an application

- 1 From the Application Management window, press <F1> for Load/Unload.

A pop-up menu as shown in Figure 4-3 appears.

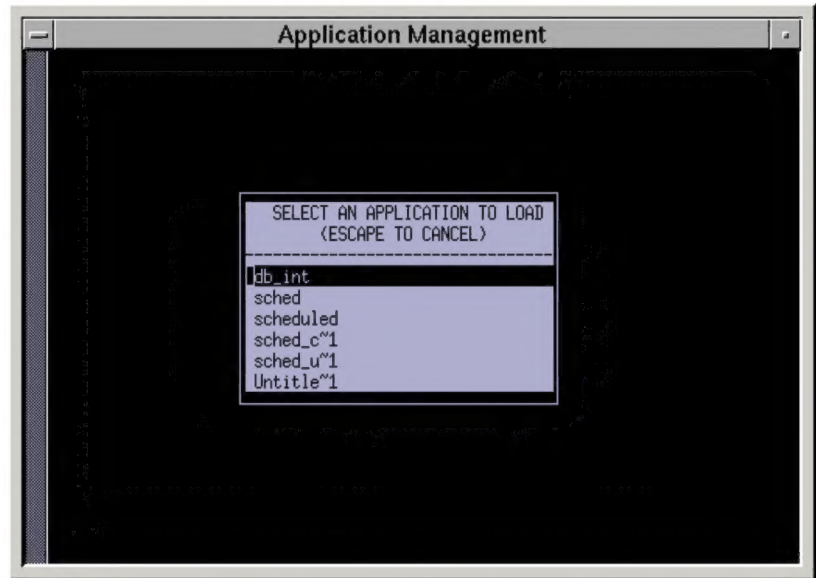
Figure 4-3
Load or unload an application pop-up window



- 2 Press <F3>, or move the cursor to Load, and press <Enter>.

The system displays the pop-up menu shown in Figure 4-4, revealing a list of all applications in the u/ivr/gen/apps subdirectory.

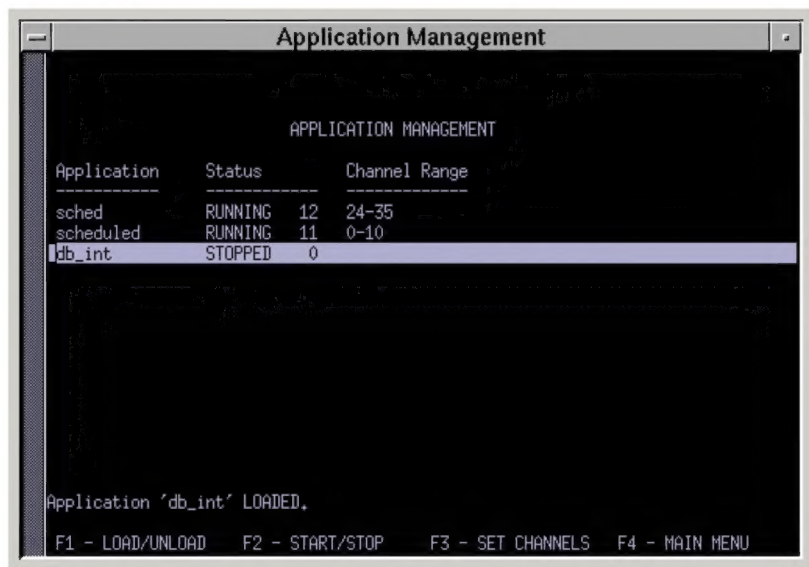
Figure 4-4
Select an Application to Load pop-up window



- 3 Move the cursor to highlight the name of the application that you want to load, then press <Enter>.

The Application Management window reappears and shows the loaded application (see Figure 4-5). The name of the application appears in the Application column to show that the application has been loaded. The word STOPPED appears in the Status column to signify that the application is stopped. After the word STOPPED, the number 0 appears, indicating that the application has not been loaded on any channels. If, for example, you select an application called "db_int", you see the Application Management window as shown in Figure 4-5.

Figure 4-5
Loaded application



The following message appears at the bottom of the window:

Application 'db_int' LOADED.

Assigning channels

Once an application has been loaded, you need to assign the application to one or more channels.

Note: Do not assign an outdialing application to a channel.

Procedure 4-3 Assigning channels

- 1 From the Application Management window, press <F3> for Set Channels.

The system displays the following prompt:

Enter The Channel Range (ESCAPE or CANCEL) :

- 2 Type a channel number or a range of channel numbers and press <Enter>.

To type a range, type the starting number, a hyphen, and the ending number. Use commas to separate ranges.

For example, to assign the application to channels 10, 11, 12, 13, 17, 18, and 19, type in the channel numbers without spaces, then press <Enter>:

10-13,17-19

The range you choose appears in the Channel Range column of the application management window (see Figure 4-6). (If you choose a channel where another application has already been loaded, you see an error message).

Notice that the Status column still displays STOPPED to indicate that the application is not running on any channels yet.

Figure 4-6
Application assigned to channels

Application	Status	Channel Range
sched	RUNNING	12 24-35
scheduled	RUNNING	10 0-9
db_int	STOPPED	1 1-13,17-19

F1 - LOAD/UNLOAD F2 - START/STOP F3 - SET CHANNELS F4 - MAIN MENU

Starting an application

After you load an application and assign channels to it, you can start it.

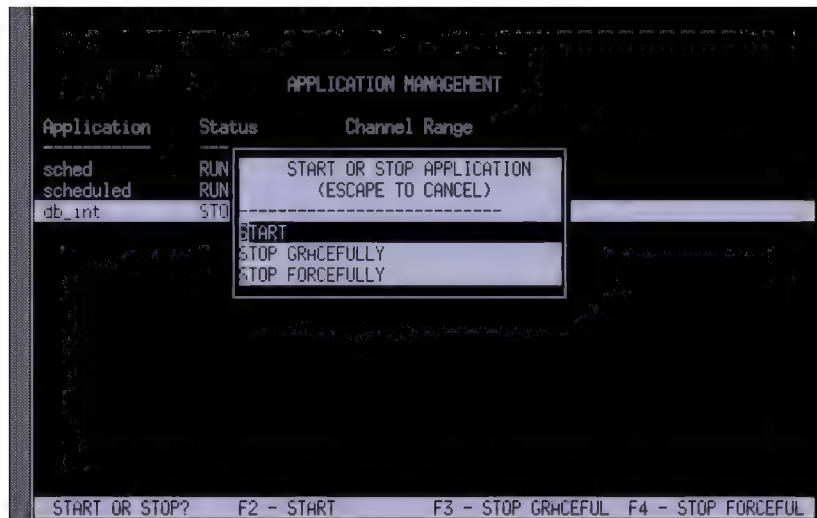
Note: You can design a primary application to start another secondary application using an EXEC cell, a GSUB cell, a DELV cell. All applications must first be started. These secondary applications would not be assigned any channels.

Procedure 4-4 Starting an application

- 1 From the Application Management window, press <F2>, then use the arrow keys to move the cursor until you highlight the name of the application that you want to start.
- 2 Press <Enter> or <F2> to start the application.

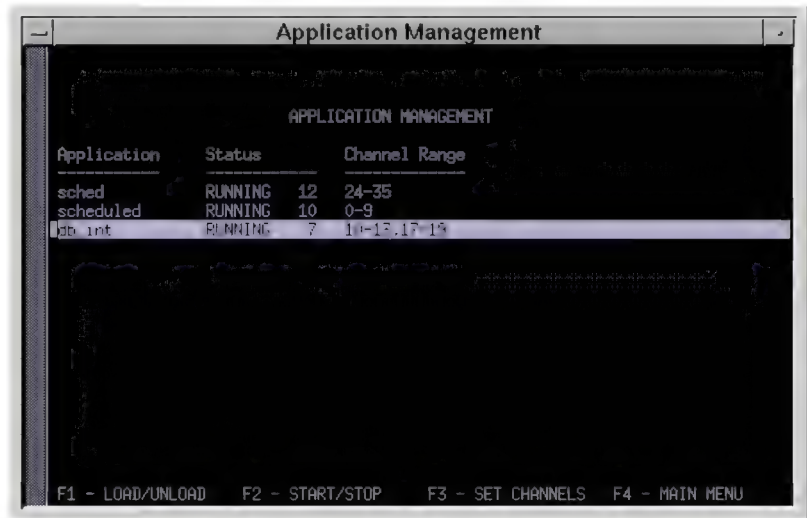
The system displays the Start or Stop Application pop-up window (see Figure 4-7).

Figure 4-7
Start or Stop Application pop-up window



The Status column for the application changes from STOPPED to RUNNING (see Figure 4-8). It also shows the number of channels on which the application is running.

Figure 4-8
An application running on seven channels



The screenshot shows a terminal window titled "Application Management". Inside, there is a table with the following data:

Application	Status	Channel Range
sched	RUNNING	12 24-35
scheduled	RUNNING	10 0-9
db_int	RUNNING	7 10-13, 17-19

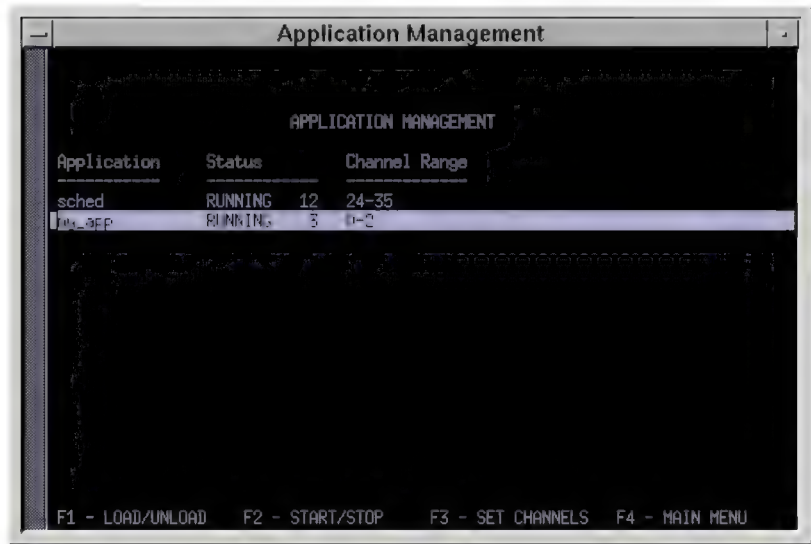
At the bottom of the window, there are four function key prompts: F1 - LOAD/UNLOAD, F2 - START/STOP, F3 - SET CHANNELS, and F4 - MAIN MENU.

Reassigning channels

You can reassign a set of channels from one application to another without interrupting service. If you follow the procedures in this section to change applications on a set of channels, each channel can continue running the old application until it has finished processing the current call in the standard way. The channel can then automatically begin running the new application.

Consider the application displayed in Figure 4-9. Application `my_app` is currently running on channels 0, 1, and 2.

Figure 4-9
Sample application running on three channels



The screenshot shows a window titled "Application Management" with a table of applications. The table has three columns: "Application", "Status", and "Channel Range". The first row shows "sched" with status "RUNNING" and channel range "12 24-35". The second row shows "my_app" with status "RUNNING" and channel range "0-2". The "my_app" row is highlighted. At the bottom of the window, there are four function keys: "F1 - LOAD/UNLOAD", "F2 - START/STOP", "F3 - SET CHANNELS", and "F4 - MAIN MENU".

Application	Status	Channel Range
sched	RUNNING	12 24-35
my_app	RUNNING	0-2

F1 - LOAD/UNLOAD F2 - START/STOP F3 - SET CHANNELS F4 - MAIN MENU

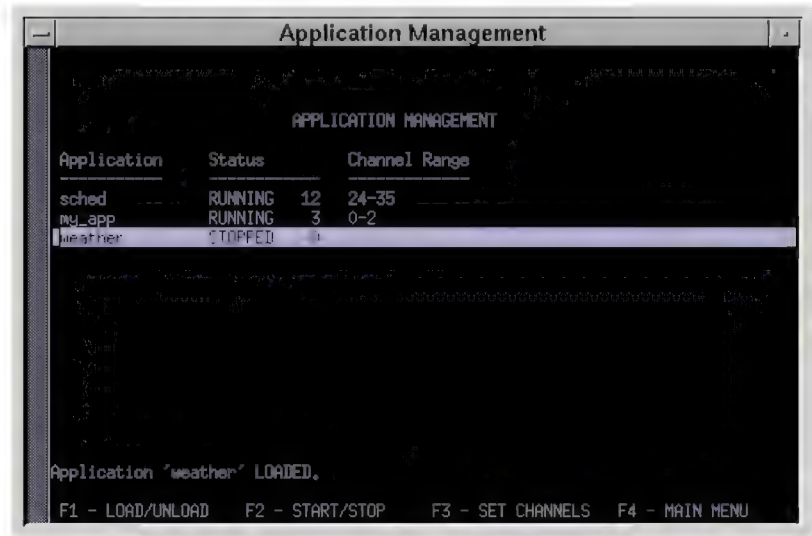
Suppose you have decided to let my_app continue running on channel 2, but you want channels 0 and 1 to begin running another application called weather.

Procedure 4-5
Reassigning channels

- 1 Load the weather application (see Procedure 4-2) without assigning any channels to it.

The Application Management window displays the following information, as shown in Figure 4-10.

Figure 4-10
"Weather" application is loaded



- 2 To assign channels 0 and 1 to weather, move the cursor until you highlight my_app, then press <F3> for Set Channels.

The system displays the following prompt:

Enter The Channel Range:

- 3 Type 2 and press <Enter>.

The system assigns channels 2 only to my_app (see Figure 4-11).

- 4 Move the cursor until you highlight weather, and press <F3>.

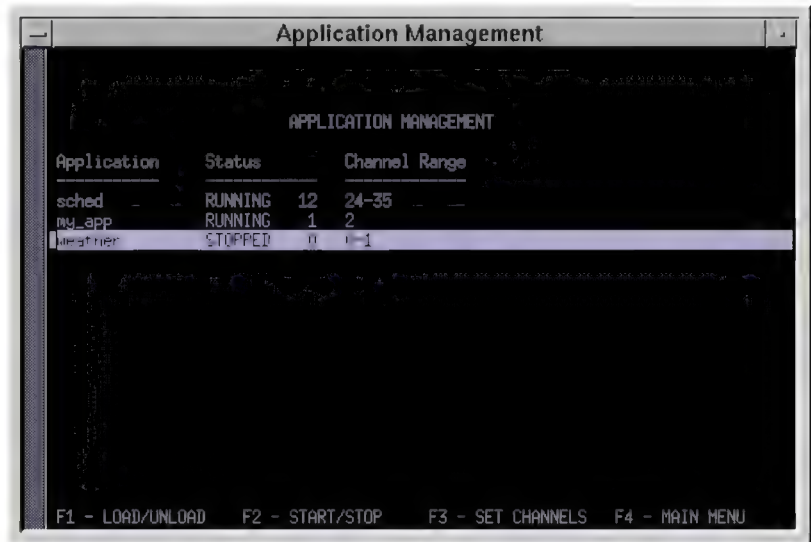
The system displays the prompt:

Enter the Channel Range:

- 5 Type 0-1 and press <Enter>.

The system assigns 0 and 1 to weather (see Figure 4-11).

Figure 4-11
Reassigning channels to weather application



The screenshot shows a window titled "Application Management" with a table of applications. The table has three columns: "Application", "Status", and "Channel Range". The "weather" application is highlighted in blue and is currently "STOPPED" on channel "0-1".

Application	Status	Channel Range
sched	RUNNING	12 24-35
rw_app	RUNNING	1 2
weather	STOPPED	0 1

At the bottom of the window, there is a footer with function keys: F1 - LOAD/UNLOAD, F2 - START/STOP, F3 - SET CHANNELS, and F4 - MAIN MENU.

- 6 To start the weather application, press <F2> for Start/Stop.

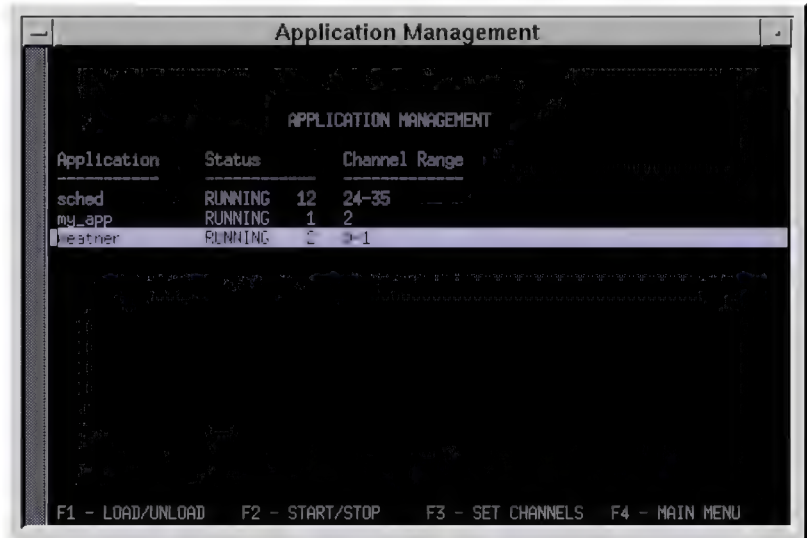
The system displays the pop-up menu.

- 7 Press <F2> for Start.

The weather application starts on channels 0 and 1, as indicated by the Status column on the Application Management window.

Figure 4-12 illustrates the weather application running on reassigned channels.

Figure 4-12
Weather application



The screenshot shows a terminal window titled "Application Management". Inside, there is a table with three columns: "Application", "Status", and "Channel Range". The table lists three applications: "sched", "my_app", and "weather". The "weather" application is highlighted with a blue background. Below the table, there are function key instructions: "F1 - LOAD/UNLOAD", "F2 - START/STOP", "F3 - SET CHANNELS", and "F4 - MAIN MENU".

Application	Status	Channel Range
sched	RUNNING	12 24-35
my_app	RUNNING	1 2
weather	RUNNING	0 0-1

F1 - LOAD/UNLOAD F2 - START/STOP F3 - SET CHANNELS F4 - MAIN MENU

Note: If my_app is currently processing calls on channels 0 and 1, then my_app continues handling these calls until they end in the normal way. The next time a call begins on either of these channels, the weather application processes the call, instead of my_app.

Stopping an application

An application can be stopped at any time. There are two options for stopping an application:

- **Stop gracefully** This option allows the application to complete its current calls in the usual way while preventing it from accepting any new calls.
- **Stop forcefully** This option stops the application without allowing it to complete its current calls. This option has been designed for use only during the development process.

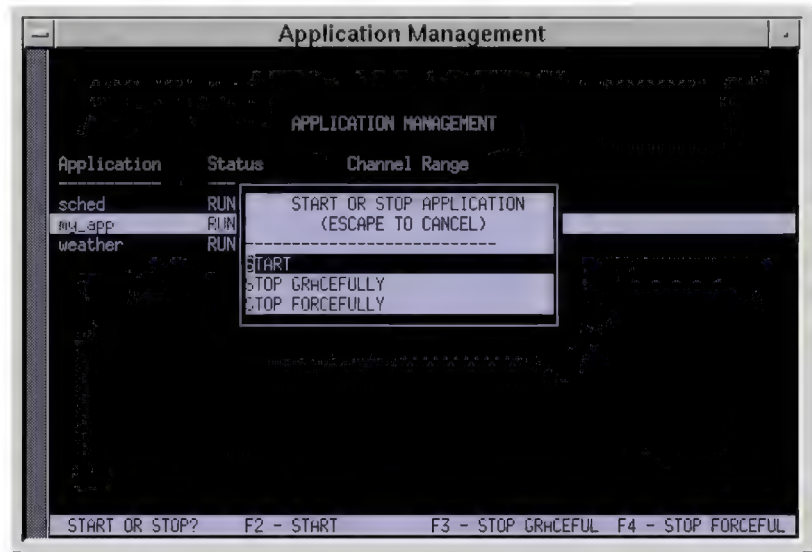
ATTENTION!

Use the Stop Forcefully option carefully. It causes the application to hang up on any callers using it.

Procedure 4-6 Stopping an application

- 1 From the Meridian IVR Application Management menu, press <F3> for Application, or move the cursor to Application Management.
- 2 Press <Enter>.
The Application Management window appears.
- 3 Move the cursor until you highlight the name of the application that you want to stop.
- 4 Press <F2>.
The Start or Stop Application pop-up window appears (see Figure 4-13).

Figure 4-13
Start or Stop Application pop-up window



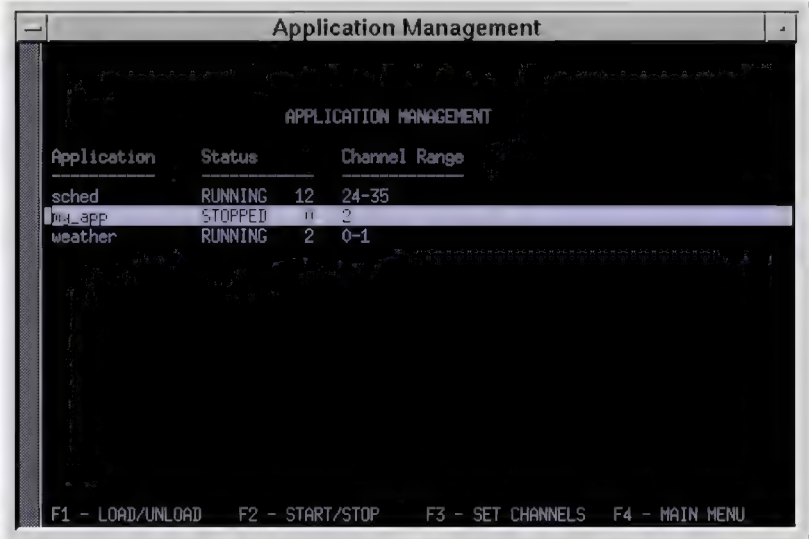
- 5 Move the cursor to highlight Stop Gracefully or Stop Forcefully, and press <Enter>. Alternatively, you can press <F4> or <F5> for Stop Gracefully or Stop Forcefully respectively.

For example, if you select Stop Gracefully for application my_app, the application allows its current calls to end normally and then stops.

If you choose Stop Forcefully, the application stops immediately.

In either case, the message lists the number of channels on which the application has been stopped. Also notice in Figure 4-14 that the Status column will change from RUNNING to STOPPED.

Figure 4-14
A stopped application



The screenshot shows a window titled "Application Management" with a table of applications. The table has three columns: "Application", "Status", and "Channel Range". The "med_app" row is highlighted. At the bottom of the window, there are four function key shortcuts: F1 - LOAD/UNLOAD, F2 - START/STOP, F3 - SET CHANNELS, and F4 - MAIN MENU.

Application	Status	Channel Range
sched	RUNNING	12 24-35
med_app	STOPPED	11 2
weather	RUNNING	2 0-1

F1 - LOAD/UNLOAD F2 - START/STOP F3 - SET CHANNELS F4 - MAIN MENU

Unloading an application

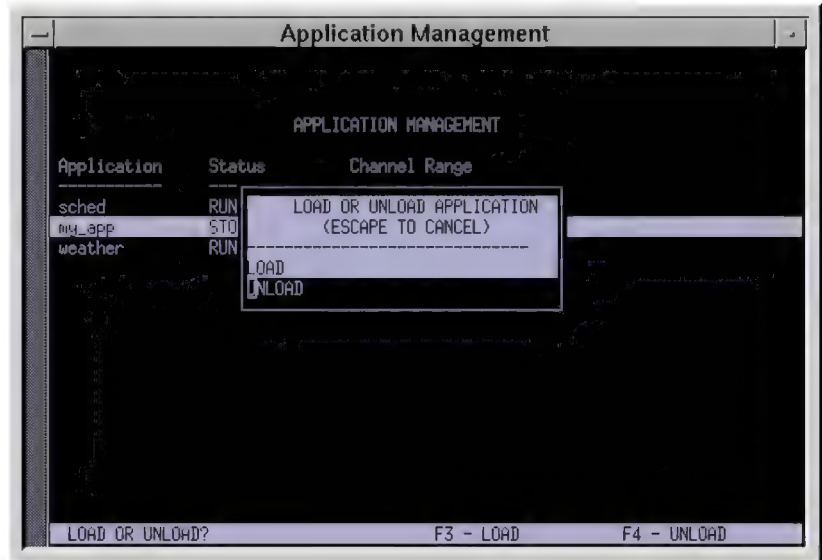
If you want to unload an application, first ensure that the application is not running.

Procedure 4-7 **Unloading an application**

- 1 Press <F1> for Load/Unload.

Meridian IVR displays the pop-up window shown in Figure 4-15.

Figure 4-15
Load/Unload Application pop-up window



- 2 Press <F4> for UNLOAD, or move the cursor to UNLOAD and press <Enter>.

Meridian IVR redisplay the Application Management window without the application included in the list, indicating that the application is unloaded.

Using the audit tool

The audit tool can handle a number of options, some of which set certain flags on the audited process (referred to here as the target), some that just display information, and some that require the audit to remain active and gather information from the target.

To invoke the audit tool, enter the following command:

audit [-p] <target> <[-v [on / off]]> [-f <file>] [-l]

Table 4-1 explains the parameters for this command.

Table 4-1
Parameters for the audit command

-p followed by the <target name>	Designates the target process you want to audit.
-v	Turns the target's verbose mode on or off (the default is on).
-f	Specifies the file to write verbose output. If you do not specify the file name, the audit tool displays the trace information on the window. Note that this option is valid only when -v is set to on.
-l	Lists the name of the target process.

Note: You must specify target and the switch -v.

If a process has been compiled to include auditing, it will keep track of all messages that are received by the process. This allows the audit tool to request history at a later time. Every message will reference a channel and the entry stored is based on the channel ID.

The space available for messages is limited. If a process stores minimal information per message, approximately 25 entries per channel are possible.

Scheduling an application

You can affect the scheduling of an application by emulating the following three cells through the command line or a shell script:

- **DELV** - Schedules an outgoing application to occur at some later time.
- **UDLV** - Unschedules a previously scheduled application event.
- **LDLV** - Gets the buffers that will be passed to a previously scheduled application event.

The sched command communicates directly with the Meridian IVR 2.0/I scheduling system, the csc, and requests the desired action. The status of the request and any output buffers are passed back as the shell command status and standard output.

Note: You must have Meridian IVR 2.0/I running to use sched.

The following section contains the command line arguments to use with sched for emulation of each specific cell.

Procedure 4-8 **Scheduling applications**

- 1 At the command line, type **sched -d** (**-d** specifies that this is the DELV request) plus one or more of the required and optional switches as shown in Table 4-2 and Table 4-3 respectively.

The command line format is:

**sched -d -a <application name> -o <phone #> -t <date-time>
-n<interval> -r minutes [-h <handle>] [-(1-5) data] [-v]**

Note: You can schedule for absolute time or relative time, or you can reschedule.

If you have successfully scheduled an event, a message appears at the prompt stating that the event has been scheduled with the event ID.

If the format was not correct in the command line, the on-line help appears listing the correct usage.

If your scheduling has failed, a message appears stating that there is no communication with the csc.

Table 4-2
Required switches: scheduling applications

-a application name	The application name to schedule; do not include the application name .vpf extension in your command line.
-o phone #	Specifies the outdial number to be passed to an application when the outgoing event is serviced by Meridian IVR 2.0/l.
-t date-time	For absolute schedule requests, enter the time in this format, mmddyyyhhmm, for the event to be serviced.
-r minutes	For relative time schedule requests, enter the time, in this format for the number of minutes: minutes from now to the actual time of the event. For example, if you wanted to start the application in 30 minutes, you would enter the number 30.
-n interval, date-time	For rescheduling time requests, enter the daily interval and the absolute time in this format: interval, for the number of days to allow between each rescheduled delivery, and mmddyyyhhmm for the absolute time to schedule the application. For example, you would enter the command line as 1 070219951200 to reschedule to run on July 2, 1995 at 12 noon.

Table 4-3
Optional switches: scheduling applications

-h handle	The delivery handle to pass to the application when the delivery event occurs. Refer to the entry on the DELV cell in Chapter 7, "The Cell Catalog," in the <i>Meridian IVR Application Guide (NTP 555-9001-310)</i> for more information about handles.
-v	Turns verbose mode on. Verbose mode provides the details of the communication with the csc, such as • the outdial number • the delivery interval • the event scheduling • response received message • the event scheduled message with the event ID
-(1-5) data	Optional data items, Data Exchange Buffers 1 through 5, consisting of whatever information you want to pass into the application when the delivery event occurs.

Procedure 4-9
Unscheduler events

- 1 Type **sched -u** (-u specifies that this is a UDLV request) plus one or more of the required and optional switches as shown in Table 4-4 and Table 4-5.

The correct command line format is

sched -e<event_id> -u [-v]

If you have successfully unscheduled an event, a message appears at the prompt stating that the event has been unscheduled with the event ID.

If the format was not correct in the command line, the on-line help appears listing the correct usage.

Table 4-4
Required switches: unscheduling events

-e event_id	Specifies the event ID for the UDLV request. Refer to the devnt tool in this chapter for more information.
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Table 4-5
Optional switches: unscheduling events

-v	Turns verbose mode on. Verbose mode provides the details of the communication with the csc, such as • the outdial number • the delivery interval • the event scheduling • response received message • the event scheduled message with the event ID
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Procedure 4-10
Listing previously scheduled events

- 1 Type **sched -l** (**-l** specifies that this is a LDLV request) plus one or more of the switches that follow.

The correct command line format is

sched -l -a <application name> -o <phone #> [-v]

If you have successfully got buffers from a previously scheduled application event, you get the handle (if you had entered the handle in the command line), the event ID, and the contents of all five Data Exchange buffers.

If the format was not correct in the command line, the on-line help appears listing the correct usage.

If the event does not exist, a message appears stating so.

Table 4-6 lists the required switches for listing previously scheduled events. Table 4-7 lists the optional switches for previously scheduled event.

Table 4-6
Required switches: previously scheduled events

-a application name	The application name to schedule; do not include the.vpf extension in your command line.
-o phone #	Specifies the outdial number for which the event has been scheduled.

Table 4-7
Optional switches: previously scheduled events

-v	Turns verbose mode on. Verbose mode provides the details of the communication with the csc, such as • the outdial number • the delivery interval • the event scheduling • response received message • the event scheduled message with the event ID
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Examples using the sched tool

Procedure 4-11

Canceling a previously scheduled event

- 1 Type the sched **-u -e event number** command to unschedule an event, where **-u** specifies that this is a UDLV request and **-e** introduces the event number that you want to unschedule.

Procedure 4-12

Scheduling an outgoing application

- 1 To schedule the application called "outbound" to be run at 6:45 p.m. on June 9, 1995, dialed to telephone number 437-1245, enter the following command:

```
sched -d -a outbound -o 4371245 -t 060919951845 -h 2000 -1 25 -2 50
```

- **-d** specifies that this is a DELV request
- **-a** the application name
- **-o** the telephone number to be dialed
- **-t** for absolute delivery time

The handle 2000 is passed to the application and the values 25 and 50 are passed to the buffers DATA EXCHANGE #1 and DATA EXCHANGE #2 in the application.

Procedure 4-13

Listing data about a scheduled event

- 1 To get information about the application “outbound” where telephone number 437-1245 is dialed, enter the following command:

sched -l -a outbound -o 4371245

- **-l** specifies that this is an LDLV request
- **-a** the application name
- **-o** the telephone number to be dialed

The following information is output to standard output:

Handle = 2000, Event Id = 2

DATA EXCHANGE #1 = 25

DATA EXCHANGE #2 = 50

DATA EXCHANGE #3 = ""

DATA EXCHANGE #4 = ""

DATA EXCHANGE #5 = ""

Creating, editing, and running scripts

You can automate the process of loading and starting applications by using a “script”. A script is a list of instructions that indicate which applications to load, start, or unload, and which channels to assign. When you run a script, Meridian IVR automatically executes the instructions listed in the script.

To create a script, you can use either the Write A Script function on the Application Management main menu or any other text editor. The Write A Script option allows you to take a snapshot of the current application configuration (that is, the one displayed on the Application Management window).

In some cases, you may not want to include the current application configuration in your script. Rather than change the current setup, you can simply define a new set of application instructions by using the text editor to create a script. Any available text editor can be used to make changes to an existing script or to create a new script without disrupting the current application configuration.

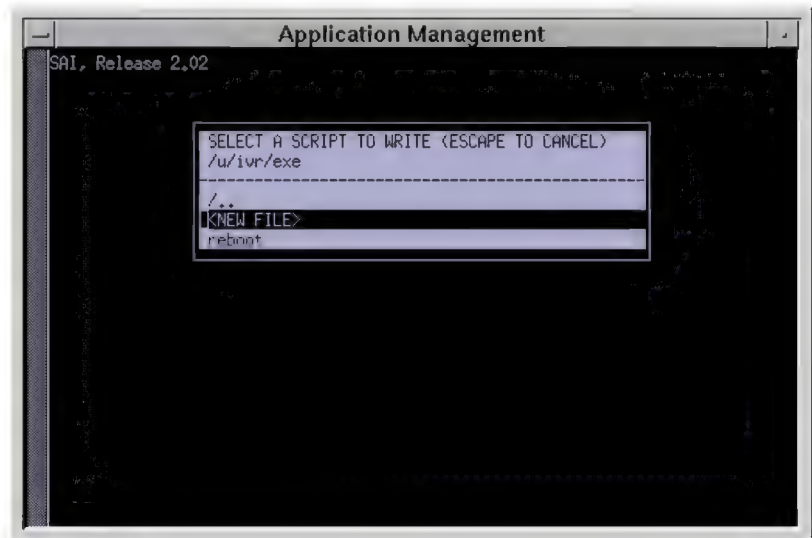
Once you have created a script, you can run it at any time.

Procedure 4-14
Creating a script

- 1 Load the applications you want to include in the script, and assign the channels.
- 2 Start the applications.
- 3 Stop and unload any active applications you do not want to include in your script.
- 4 From the Meridian IVR Application Management Menu, select the Write a Script option.

Meridian IVR displays a menu as shown in Figure 4-16.

Figure 4-16
A sample Select a Script to Write menu



Note: The Select a Script to Write menu (as shown in Figure 4-16) lists scripts available in the current directory. In this example, the name of the current directory is u/ivr/exe. An existing script in the current directory is named reboot.

- 5 Select the <NEW FILE> option from the menu to create a new script in the current directory.

Note: Selecting <NEW FILE> creates a new script by taking a snapshot of the current application configuration (for example, as displayed on the Application Management window).

The SAI displays the following prompt:

Write Script As: Untitled

- 6 “Untitled” is the default script name. To save the script under a different name, type a name up to 10 characters long, then press <Enter>.

The SAI creates the script and redisplay the SAI Main Menu.

Note: Using the Write a Script option creates a script that reflects the current configuration. If you want your script to unload an application, you must edit the script to add an UNLOAD instruction (see the “Editing a script” section in this chapter).

Figure 4-17 illustrates a script called “news.sai” which was created using the Write a Script option. Notice that Meridian IVR automatically writes a script that includes comments and a report, along with commands for loading applications, assigning channels, and starting the applications.

Figure 4-17
The “news.sai” script

```
# This is a script file that can be run by the SAI.
# Lines that begin with a pound character ('#') are comments.
# The first half of this file is a report.
# The second half contains commands to be executed by the SAI.

# APPLICATION STATUS CHANNEL RANGE
#
# News STARTED 1 2
#
# Sports STOPPED 0
#
# Weather STOPPED 0 0-3, 6

# These are the SAI commands to be executed:
# For Application 'News'

LOAD News
SET_CHANNELS News 2
START News

# For Application 'Sports'

LOAD Sports

# For Application 'Weather'

LOAD Weather
SET_CHANNELS Weather 0-3, 6
```

When news.sai runs, it performs the following actions:

- It loads the News application, assigns Channel 2, and starts the application.
- It loads the Sports application without assigning any channels or starting the application.
- It loads the Weather application and assigns Channels 0, 1, 2, 3, and 6, but it does not start the application.

Note: When news.sai runs, it does not affect any other applications that are currently running.

Procedure 4-15
Editing a script

- 1** If necessary, change to the directory where you want to create or edit the script. You can navigate through the directories and subdirectories in two ways:
 - Selecting `../` changes the directory to the parent directory.
 - Selecting a name beginning with a slash mark (for example, `/ivr`) changes the current directory to the specified subdirectory.
- 2** Use the text editor of your choice to create a new file or to open an existing file for editing.

Note: All script file names are identified by the `.sai` extension and can be up to 10 characters long (excluding the extension).
- 3** You can type any of the following commands

To load an application on Meridian IVR	LOAD <i>application_name</i>
To unload an application from Meridian IVR	UNLOAD <i>application_name</i>
To assign one or more channels to an application	SET_CHANNELS <i>application_name</i> <i>channel_range</i>
To start an application on all assigned channels	START <i>application_name</i>
To gracefully stop an application	STOP <i>application_name</i>
To forcefully stop an application	FSTOP <i>application_name</i>
To execute a script named <i>file_name</i>	RUN <i>file_name</i>
To save the current application configuration to a script named <i>file_name</i>	WRITE <i>file_name</i>
To Add comments	#comments

Notes: Comment lines must begin with the # character. You can also insert blank lines wherever you want. Meridian IVR ignores blank lines and comments when running a script.

- 1 *application_name* is the name of an application without the .vpf extension
- 2 *channel_range* specifies the channel(s) to be assigned to the application.
- 3 A range consists of channel numbers separated by hyphens or commas, but no spaces.
- 4 Save the file and exit the editor.

For example, suppose you want to create a script called PriceSwap.sai to do the following:

- Unload an application called “prices”.
- Load an application called “Orders”.
- Assign channels 4, 8, 9, 10, and 22 to it.
- Start the application on those channels.

If you follow the steps listed in this section to create PriceSwap.sai, it may look like Figure 4-18. (Comments and blank lines are optional.)

Figure 4-18
PriceSwap.sai script

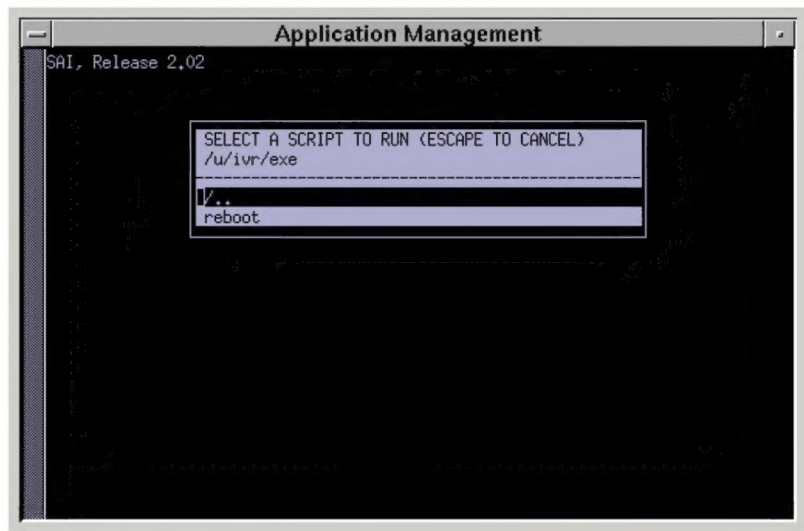
```
# This is the PriceSwap script.  
  
UNLOAD prices  
LOAD Orders  
SET_CHANNELS Orders 4,8-10,22  
START Orders
```

Procedure 4-16
Running a script

- 1 From the Application Management main menu, select the Select a Script option.

Meridian IVR displays the pop-up menu shown in Figure 4-19.

Figure 4-19
Select a Script to run pop-up window



- 2 Move to the directory where your script is located, and select the file name from the menu.

Meridian IVR executes the script and returns to the Application Management main menu. If you check the Application Management window, it reflects the changes made by your script.

The “reboot.sai” script

Whenever you boot the system or reset Meridian IVR, Meridian IVR looks in the /u/ivr/exe subdirectory of the Meridian IVR base directory for a file named “reboot.sai”. Initially, there is no reboot.sai file.

The reboot.sai file is a script that you can create to automatically load applications, set channels, and start applications when Meridian IVR is started. This file is useful for initializing the application environment whenever

- the applications processor is initially booted
- the applications processor is rebooted following a power failure
- Meridian IVR recovers from a software failure

You can create this script file using a text editor or the Meridian IVR Write a Script option.

Exiting Application Management

To exit Application Management from the Application Management main menu, select Exit.